

### Abstract

Provided is a method for manufacturing a glass optical element comprising steps of: molding a glass material softened with a molding device which comprises an upper mold having a molding surface and a lower mold having a molding surface so that optically functional surfaces are formed on the glass material by applying a molding pressure, cooling the glass material so that the glass material obtains a predetermined viscosity, and removing the cooled glass material from the molding device, wherein a temperature of the glass material is maintained, in the cooling step, within a range of  $(T_g+30)$  to  $(T_g-50)$  degree centigrade at least for a predetermined time, and a secondary pressure is applied to the glass material at least during the predetermined time, so that the strain in the glass material is reduced, where  $T_g$  represents glass transition temperature of the glass.